

## Abstract

In the present invention, a nonionic surfactant is noticed for a function of dispersing a carbon nanotube, and it is found that a mixture solution of an amide-based organic solvent and a polyvinylpyrrolidone (PVP) or of the amide-based organic solvent, the nonionic surfactant, and the polyvinylpyrrolidone (PVP) has an excellent function as a dispersant for the carbon nanotube. Ultrasonication is required for dispersing a carbon nanotube in the dispersant. The ultrasonication may be carried out in the step of dispersing the carbon nanotube in the nonionic surfactant and/or the amide-based polar organic solvent, and then the polyvinylpyrrolidone (PVP) may be mixed with the resultant dispersion. Alternatively, a mixture solution of the nonionic surfactant and/or the amide-based polar organic solvent, and the polyvinylpyrrolidone (PVP) is prepared, and then the ultrasonication may be carried out in the step of dispersing the carbon nanotube therein.